

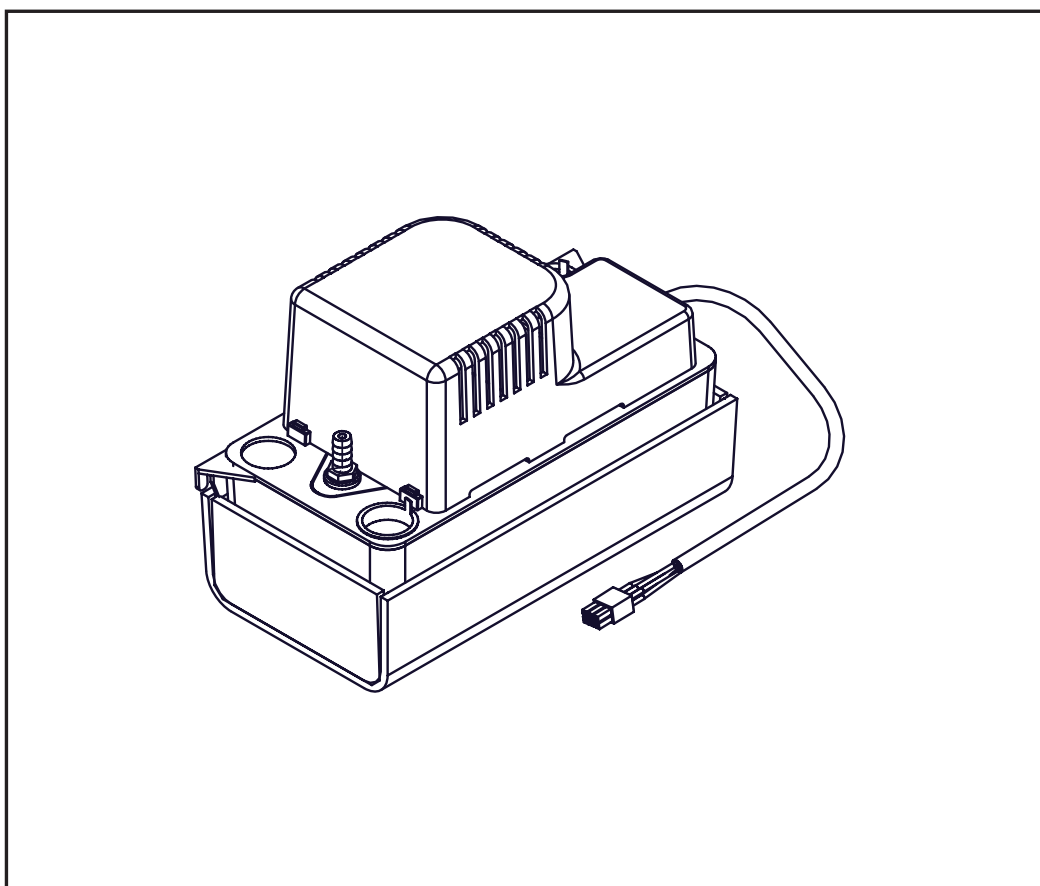
INSTALLATION MANUAL

CONDENSATE PUMP KIT

(Part No. GX484789-0180)

FOR CM 25

Production Period: From October 2009 (1009)



READ THIS MANUAL CAREFULLY FOR INSTRUCTIONS ON CORRECT
INSTALLATION AND USAGE, AND READ ALL SAFEGUARDS.



MOVINCOOL®
THE #1 SPOT COOLING SOLUTION

© 2009 DENSO SALES CALIFORNIA, INC.

All rights reserved. This book may not be reproduced or copied, in whole or in part, without the written permission of the publisher. DENSO SALES CALIFORNIA, INC. reserves the right to make changes without prior notice. MovinCool is a registered trademark of DENSO Corporation.

INSTALLATION MANUAL

CONDENSATE PUMP KIT

FOR CM 25

MOVINCOOL®
THE #1 SPOT COOLING SOLUTION

FOREWORD


Congratulations on purchasing a MovinCool Condensate Pump.

This manual explains how to install the condensate pump onto MovinCool unit. Please read this installation manual thoroughly to familiarize yourself with the features of the unit and to ensure years of reliable operation. You may also find it useful to keep this installation manual on hand for reference.

Components and/or procedures are subject to change without prior notice.

Definition of Terms

 WARNING: Describes precautions that should be observed to prevent injury to the user during installation or unit operation.

 CAUTION: Describes precautions that should be observed to prevent damage to the unit or its components, which may occur during installation or unit operation if sufficient care is not taken.

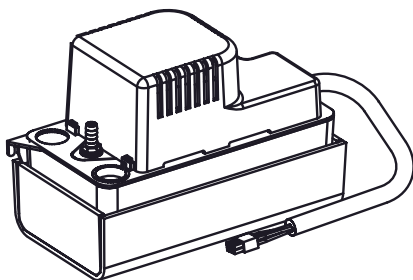
Note: Provides additional information that facilitates installation or unit operation.

GENERAL WARNINGS & CAUTIONS

- All electrical work, if necessary, should only be performed by qualified electrical personnel. Repair to electrical components by non-certified technicians may result in personal injury and/or damage to the unit. All electrical components replaced must be genuine, MovinCool or DENSO brand purchased from an authorized reseller.
- Do not handle the pump with wet hands or when standing in water as fatal shock could occur. Disconnect all power from the MovinCool before servicing the unit for any reason.
- Protect the power cable from coming in contact with sharp objects.
- Do not kink or allow power cord to come in contact with oil, grease, chemicals, or hot surfaces.
- To reduce risk of electrical shock, connect MovinCool unit to a properly grounded terminal.

INVENTORY

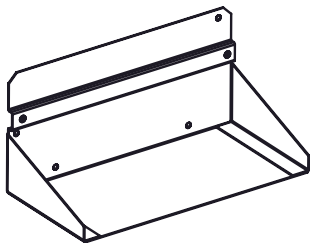
After unpacking your Condensate Pump Kit, please check to make sure you have the following items:



Condensate Pump (1)



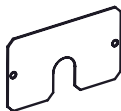
20 ft (6.0 m) Drain
Outlet Hose (1),
3/8 in (9.5 mm) diameter



Adapter Plate (1)



Drain Inlet Hose (1)



Cover Plate (1)



Grommet (1)



Clamp (1)



L10 Screws (2)

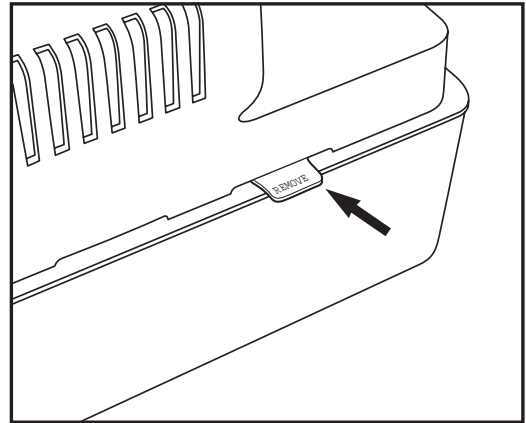


L16 Screw (1)

Note: If any of these items are not included in the box or appear damaged, please contact your MovinCool reseller for replacement .

PUMP INSTALLATION

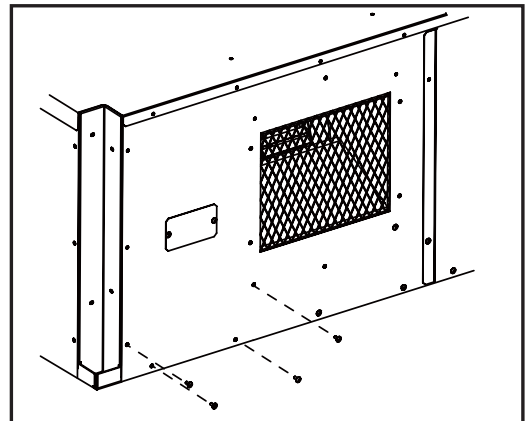
1. Remove tab from pump.



2. Disconnect the power from CM25.

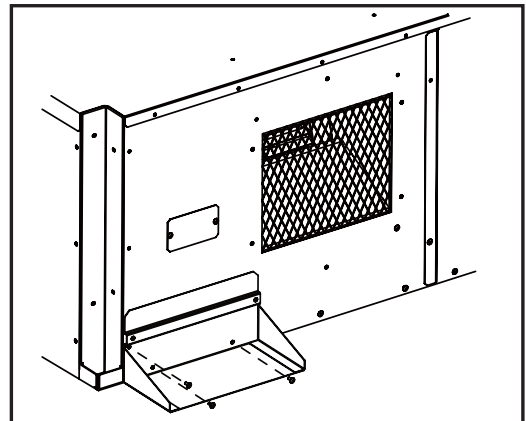
⚠ WARNING: Make sure CM25 circuit breaker is in the “OFF” position.

3. Remove the four screws from the front left panel of the unit.



4. Install the adapter plate with the three screws which were previously removed.

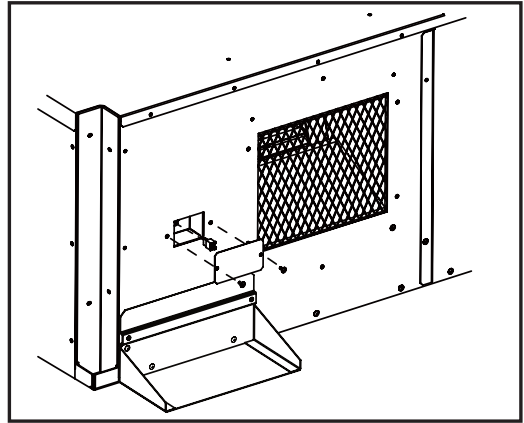
Note: Keep an extra screw for future application.



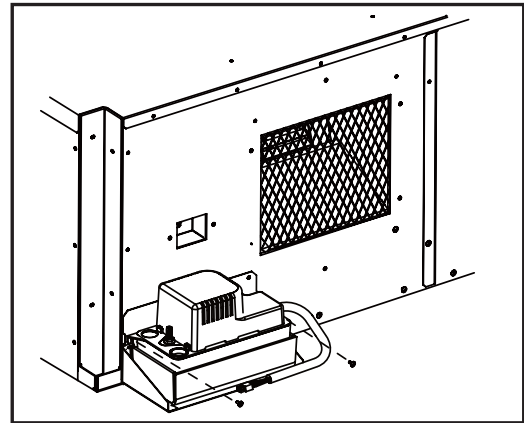
PUMP INSTALLATION (cont.)

5. Remove the cover plate by removing the two screws.
6. Remove the jumper plug from mating connector.

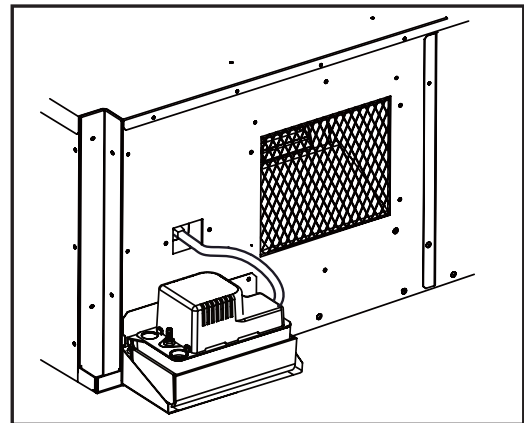
Note: Keep the jumper plug for future application.



7. Mount the condensate pump assembly to the adapter plate with the two L10 screws supplied in the kit.

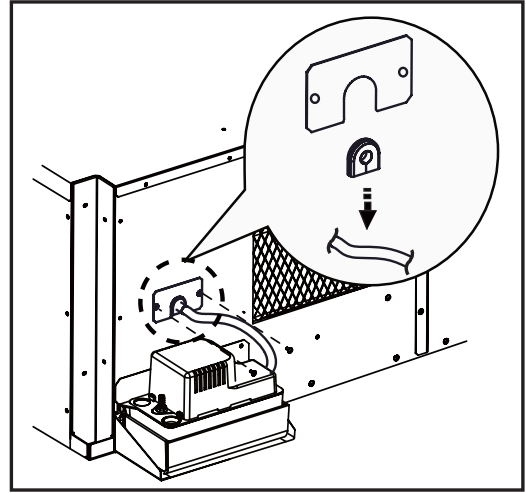


8. Connect the pump connector to the mating connector.



PUMP INSTALLATION (cont.)

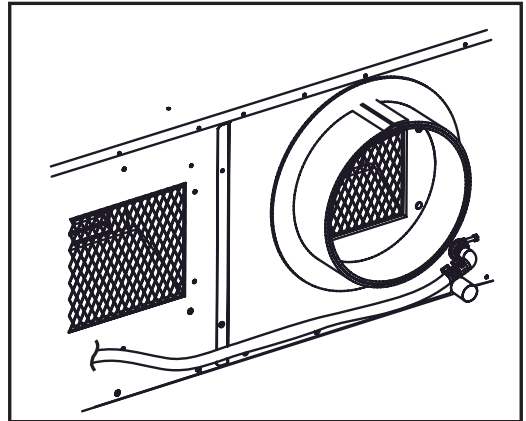
9. Attach the grommet and cover plate to the adapter harness.
10. Install the cover plate with two screws which were previously removed in step 5.



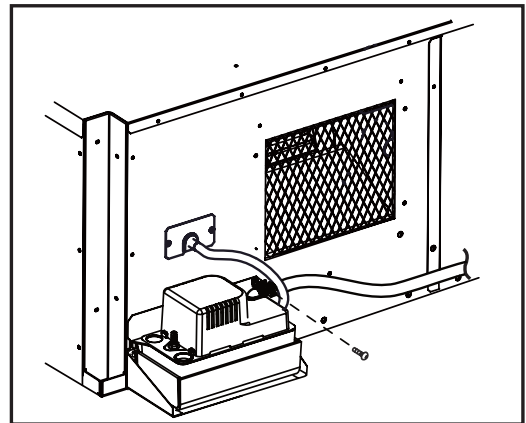
HOSE INSTALLATION

1. Plug in one end of the drain inlet hose with the supplied clamp into the drain pipe of the unit. Tighten the screw in the clamp.

Note: Insulate the drain inlet hose to prevent condensation if necessary.



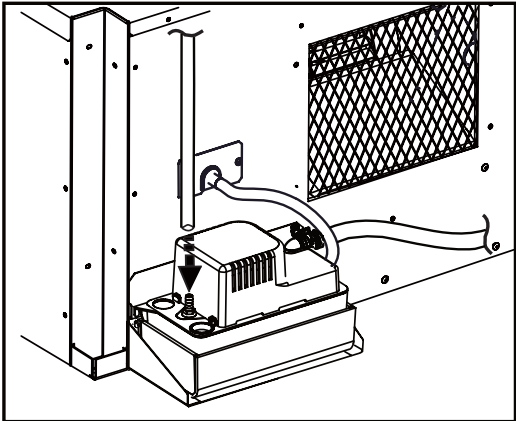
2. Insert the other end of the drain inlet hose into the condensate pump inlet drain hole. Secure the hose to the adapter plate with the supplied L16 screw.



HOSE INSTALLATION (cont.)

3. Plug in the supplied 20 feet (6 m) drain outlet hose into the drain outlet spout of the condensate pump.

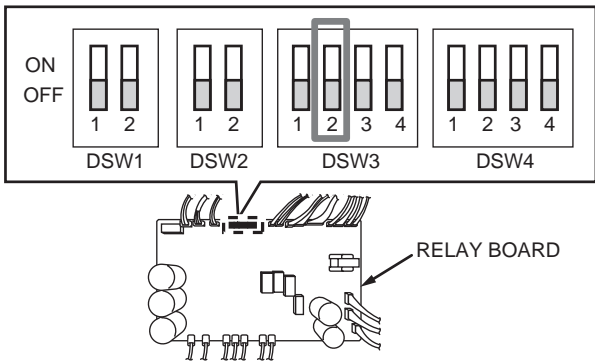
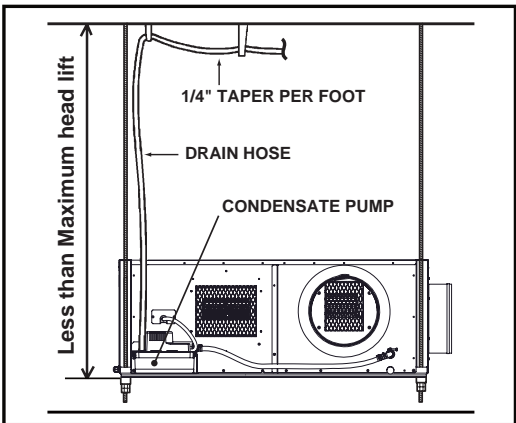
Note: Insulate the drain outlet hose to prevent condensation if necessary.



4. Check the drainage performance after installation. It is important that the drainage line from the pump is free of kinks and is not pinched.

Note:

- 1) Power fluctuation or low voltage could result in incorrect drainage.
- 2) Make sure that DIP switch #2 of DSW3 on the relay board of CM25 is set to the “OFF” position to enable the internal condensation removal pump.



To ensure proper drainage, locate the highest vertical position, no more than the maximum head lift which shown in the table, and run the drain hose on a a downward slope at a minimum rate of 1/4 inch (6.25 mm) per foot.

	Maximum head lift
230 VAC	17 ft (5.2 m)
208 VAC	13 ft (4.0 m)

INSPECTION & MAINTENANCE

⚠ WARNING: When performing any maintenance and/or troubleshooting, make sure that all electrical power is off. This means before service, unplug the unit from the electrical outlet or if permanently wired, make sure the circuit breaker is in the off position.

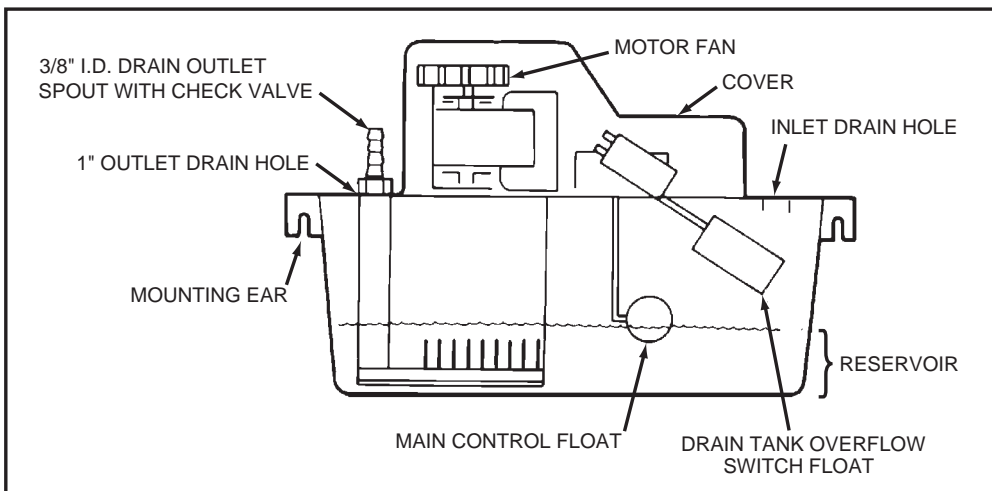
- 1) Remove any dirt or debris which may collect in the bottom of the reservoir tank.
- 2) On a monthly basis, check the condensate drain hose for kinks, blockage or any other damage that may obstruct condensate pump from draining properly.
- 3) Always replace the fan motor cover to keep electrical parts free of dust, dirt and any other foreign material.

Testing Drain Tank Overflow Switch

This safety feature will stop the unit operation if the pump malfunctions. To test the drain tank overflow switch, pinch the drain outlet hose and pour water into the reservoir inlet drain hole. Continue to fill the reservoir until rising water lifts the overflow switch and stops the operation. Self-diagnostic code “E07” is displayed on the supplied wall mounted controller and a buzzer (pattern 3) turns on. Only a buzzer turns on for the field supplied millivolt wall thermostat.

Note: Before testing, make sure that DIP switch #2 of DSW3 on the relay board of the unit is set to the OFF position to enable the internal condensation removal pump.

If the unit continues to operate when the reservoir is full, check your installation procedure. After testing is completed, release the drain outlet hose and the condensate pump will empty the reservoir. Make sure the drain inlet hose is installed into the inlet drain hole of the pump reservoir. To clear self-diagnostic code and buzzer, press RESET button for the wall mounted controller or reset power from the circuit breaker for the millivolt wall thermostat.

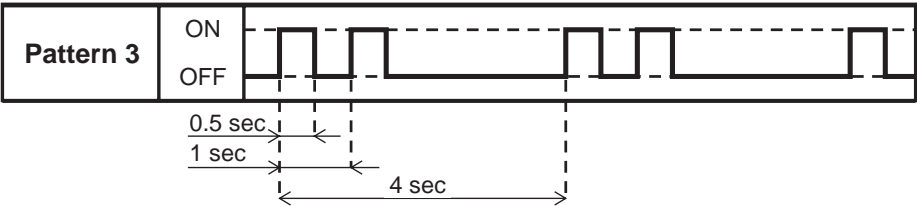


TROUBLESHOOTING

Check the following items before calling your MovinCool reseller or a qualified technician.

Self-Diagnostic Codes (Wall mounted controller)	Buzzer Pattern	Possible Cause	Remedy	
			Wall Mounted Controller	Millivolt Wall Thermostat
PU	3	Drain hose clogged (for internal drain pump).	Check drain hose for any blockages or excessive kinks that may prevent water flow. To reset: Press RESET button.	Check drain hose for any blockages or excessive kinks that may prevent water flow. To reset: Reset power from the circuit breaker.
		Drain hose trap position is too high to pump up condensation water (for internal drain pump).	Improve hose installation. To reset: Press RESET button.	Improve hose installation. To reset: Reset power from the circuit breaker.
		Internal drain pump is not working.	Check the internal drain pump connection. Replace drain pump. To reset: Press RESET button.	Check the internal drain pump connection. Replace drain pump. To reset: Reset power from the circuit breaker.
E07	3	Drain hose is clogged (for optional condensate pump).	Check drain hose for any blockages or excessive kinks that may prevent air flow. To reset: Press RESET button.	Check drain hose for any blockages or excessive kinks that may prevent air flow. To reset: Reset power from the circuit breaker.
		Drain hose trap position is too high to pump up condensation water (for optional condensate pump).	Improve hose installation. To reset: Press RESET button.	Improve hose installation. To reset: Reset power from the circuit breaker.
		Optional condensate pump is not working.	Check the condensate pump connection. Replace the pump. To reset: Press RESET button.	Check the condensate pump connection. Replace the pump. To reset: Reset power from the circuit breaker.

Buzzer Pattern



DENSO

DENSO SALES CALIFORNIA, INC.

Long Beach CA, 90810
www.movincool.com